

REMARKS

Claims 1-26 were pending prior to this response. Claims 13 and 14 were allowed and claims 8, 9, and 12 were objected to. The remaining claims were rejected. Claims 18 and 22 have been cancelled herein. Claims 27 and 28 have been added, but do not add any new matter to the application. Claims 1-13, 15-17, 19-21, and 22-26 have been amended herein.

I. Rejection of Claims 1, 2, 4-7, 11, and 17-24 Under 35 U.S.C. §103(a)

Claims 1, 2, 4-7, 11, and 17-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Iwasaki (U.S. 5,701,526) in view of Inuiya (U.S. 5,905,529).

CLAIM 1

Claim 1 is independent is restated as follows:

A method of detecting artificial illumination in a scene, comprising:
predicting at least one frequency for a variation in the illumination in the scene;
measuring light from the scene at a periodic rate, wherein the periodic rate is different than any of the predicted frequencies, using an exposure length that is different than any of the periods of the predicted frequencies;
detecting the presence of an artificial illuminant when the measured light from the scene contains periodic changes.

According to the office action, the elements of "measuring light from the scene at a periodic rate, wherein the periodic rate is different than any of the predicted frequencies" and "exposure length that is different than any of the periods of the

"predicted frequencies" are disclosed at column 1, lines 56-61, of Iwasaki which are restated as follows:

Therefore, the calculation of the influence of flicker cycle such as that described above is critical when the accumulated time is relatively short in comparison with the flicker. More specifically when the accumulated time is less than the time of about one cycle of flicker (in the case of 50 Hz one cycle of flicker is 10 mS) the calculation of flicker is critical.

The applicants note that there is nothing in the cited section of Iwasaki related to "measuring light from the scene at a periodic rate, where the periodic rate is different than any of the predicted frequencies" as claimed in claim 1. Rather, the cited portion of Iwasaki solely relates to the accumulated time in capturing a single picture. As stated above, the reference is made to the accumulated time being critical when it is less than about one cycle of flicker. There is no disclosure related to measuring light from a scene at a periodic rate.

The measuring element of claim 1 is also not disclosed by Inuiya.

Therefore, neither Iwasaki nor Inuiya, nor their combination, disclose all the elements of claim 1. Accordingly, neither Iwasaki, Inuiya, nor their combination can render claim 1 obvious.

Based on the foregoing, the applicants request reconsideration of the rejection.

CLAIMS 2, 4-7, AND 11

Claims 2, 4-7, and 11 are ultimately dependent on claim 1 and are deemed allowable by way of their dependence and for other reasons. Based on the foregoing, the applicants request reconsideration of the rejections.

CLAIM 17

Claim 17 is independent and, as amended herein, is restated as follows:

An apparatus for detecting artificial illumination in a scene, the apparatus comprising:

a photo sensor array, the photo sensor array configured to measure light from the scene at a preselected frequency using a predetermined exposure time, wherein the preselected frequency is approximately twice a frequency of a power source supplying an artificial illuminate, but not equal to twice the frequency of the power source; and

a processor, the processor configured to determine the presence of an artificial illuminant by examining the measured light from the scene for periodic intensity variations.

Claim 17 has been amended to include many of the elements of claim 18, which has been cancelled herein. Claim 17 now includes the element of "wherein the preselected frequency is approximately twice a frequency of a power source supplying an artificial illuminate, but not equal to twice the frequency of the power source" which is similar to the elements of claim 18.

The office action states that the elements of claim 18 are disclosed in Iwasaki by Fig. 13A and column 1, lines 44-47. The applicants respectfully disagree. Referring to Fig. 13A, the measurement of light intensity is disclosed to occur at half the period of flicker or twice the frequency of the flicker. Claim 17, on the other hand, recites that the frequency of the measurements is NOT twice the flicker frequency. Thus, Iwasaki does not include all the elements of claim 17 and cannot render claim 17 obvious.

The portion of Iwasaki cited in the office action, column 1, lines 44-47 are restated as follows:

Therefore, the calculation of the influence of flicker cycle such as that described above is critical when the accumulated time is relatively short in comparison with the flicker. More specifically when the accumulated time is less than the time of about one cycle of flicker (in the case of 50 Hz one cycle of flicker is 10 mS) the calculation of flicker is critical.

This portion of Iwasaki refers to accumulation time, which is similar to the exposure time of claim 17. This portion Iwasaki is not related to the preselected frequency of claim 17 and, thus does not disclose "wherein the preselected frequency is approximately twice a frequency of a power source supplying an artificial illuminate, but not equal to twice the frequency of the power source" as claimed in claim 17.

Based on the foregoing, neither Iwasaki nor Inuiya, nor their combination, disclose all the elements of claim 17. Therefore, the applicants request reconsideration of the rejection.

CLAIMS 21, 23, AND 24

Claims 21, 23, and 24 are dependent and, as amended herein, contain elements similar to the elements of claim 17 discussed above. As stated above, the cited art does not disclose these elements and, therefore, cannot render the claims obvious. Thus, the applicants request reconsideration of the rejections.

CLAIMS 19 AND 20

Claims 19 and 20 are dependent on claim 17 and are deemed allowable by way of their dependence and for other reasons. Therefore, the applicants request reconsideration of the rejections.

II. Rejection of Claim 10 Under 35 U.S.C. §103(a)

Claim 10 was rejected under 35 U.S.C. §103(a) as being unpatentable over Iwasaki and Inuiya in view of Smith (U.S. 6,501,518).

Claim 10 is dependent on claim 1 and is deemed allowable by way of its dependence and for other reasons. Therefore, the applicants request reconsideration of the rejection.

III. Double Patenting Rejection of Claims 1-7, 15-18, and 21-26

Claims 1-7, 15-18, and 21-26 were provisionally rejected under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1-7 and 10-19 of copending application 10/002,701. The applicants request that this rejection be held in abeyance until a final determination is made as to the claims.

In view of the above, all of the pending claims are now believed to be in condition for allowance and a notice to that effect is earnestly solicited.

Respectfully submitted,
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